

## SEQUENCE LISTING

<110> RONN, LARS CHRISTIAN  
HOLM, ARNE  
OLSEN, MARIANNE  
OSTERGAARD, SOREN  
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SOROKA, VLADISLAV  
RALETS, IGOR  
BEREZIN, VLADIMIR  
BOCK, ELISABETH

<120> NCAM BINDING COMPOUNDS

<130> 12596/P66506US0

<140> 09/787,443  
<141> 2001-03-29

<150> PA 1998 01232  
<151> 1998-09-29

<150> PA 1999 00592  
<151> 1999-04-29

<160> 44

<170> PatentIn Ver. 2.1

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<400> 1  
Ala Ser Lys Lys Pro Lys Arg Asn Ile Lys Ala  
1 5 10

<210> 2  
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<220>  
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peptide

<400> 2  
Ala Lys Lys Glu Arg Gln Arg Lys Asp Thr Gln  
1 5 10

<210> 3  
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<220>  
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peptide

<400> 3  
Ala Arg Ala Leu Asn Trp Gly Ala Lys Pro Lys  
1 5 10

<210> 4  
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<220>  
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peptide

<400> 4  
Ala Gly Ser Ala Val Lys Leu Lys Lys Lys Ala  
1 5 10

<210> 5  
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<220>  
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peptide

<400> 5  
Ala Lys Tyr Val Leu Ile Pro Ile Arg Ile Ser  
1 5 10

<210> 6  
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<220>  
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peptide

<400> 6  
Ala Ser Thr Lys Arg Ser Met Gln Gly Ile  
1 5 10

<210> 7  
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<212> PRT  
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<220>  
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<400> 7  
 Ala Arg Arg Ala Ile Leu Met Xaa Ala Leu  
           1                  5                  10

<210> 8  
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<220>  
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<400> 8  
 Ala Tyr Tyr Leu Ile Val Arg Val Asn Arg Ile  
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<210> 9  
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<400> 9  
 Ala Thr Asn Lys Lys Thr Gly Arg Arg Pro Arg  
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<400> 10  
 Ala Lys Arg Asn Gly Pro Leu Ile Asn Arg Ile  
           1                  5                  10

<210> 11  
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<220>  
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peptide

<400> 11  
Ala Lys Arg Ser Val Gln Lys Leu Asp Gly Gln  
1 5 10

<210> 12  
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<220>  
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<400> 12  
Ala Arg Gln Lys Thr Met Lys Pro Arg Arg Ser  
1 5 10

<210> 13  
<211> 10  
<212> PRT  
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<220>  
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peptide

<400> 13  
Ala Gly Asp Tyr Asn Pro Asp Leu Asp Arg  
1 5 10

<210> 14  
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peptide

<400> 14  
Ala Arg Lys Thr Arg Glu Arg Lys Ser Lys Asp  
1 5 10

<210> 15  
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<400> 15  
Ala Ser Gln Ala Lys Arg Arg Lys Gly Pro Arg  
1 5 10

<210> 16  
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peptide

<400> 16  
Ala Pro Lys Leu Asp Arg Met Leu Thr Lys Lys  
1 5 10

<210> 17  
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<400> 17  
Ala Lys Lys Glu Lys Pro Asn Lys Pro Asn Asp  
1 5 10

<210> 18  
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<400> 18  
Ala Gln Met Gly Arg Gln Ser Ile Asp Arg Asn  
1 5 10

<210> 19  
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<212> PRT  
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<400> 19  
Ala Glu Gly Gly Lys Lys Lys Lys Met Arg Ala  
1 5 10

<210> 20  
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<400> 20  
Ala Lys Lys Lys Glu Gln Lys Gln Arg Asn Ala  
1 5 10

<210> 21  
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<400> 21  
Ala Lys Ser Arg Lys Gly Asn Ser Ser Leu Met  
1 5 10

<210> 22  
<211> 11  
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<400> 22  
Ala Arg Lys Ser Arg Asp Met Thr Ala Ile Lys  
1 5 10

<210> 23  
<211> 12  
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<220>  
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<400> 23  
 Gly Arg Ile Leu Ala Arg Gly Glu Ile Asn Phe Lys  
       1                  5                  10

<210> 24  
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<400> 24  
 Gly Ser Ile Leu Ala Ser Gly Glu Ser Asn Phe Lys  
       1                  5                  10

<210> 25  
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 <212> PRT  
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<220>  
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 peptide

<400> 25  
 Gly Arg Ile Leu Ala Arg Gly Ser Ser Asn Phe Lys  
       1                  5                  10

<210> 26  
 <211> 12  
 <212> PRT  
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<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 26  
 Gly Glu Ile Ser Val Gly Glu Ser Lys Phe Phe Leu  
       1                  5                  10

<210> 27  
 <211> 4  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 27

Lys Lys Pro Lys

1

<210> 28

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 28

Lys Lys Glu Lys

1

<210> 29

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 29

Lys Lys Glu Arg

1

<210> 30

<211> 75

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 30

ctgcaggtag atattgttcc cagccaagga gccatcagcg ttggagcctc cgccttcttc 60  
ctgtgtcaag tggca 75

<210> 31

<211> 72

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer



<400> 31  
attcacaatg acctgaatgt ccttgaagtt gatggccccg gcggccagga tggcgccctc 60  
acagcggtaa gt 72

<210> 32  
<211> 11  
<212> PRT  
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<220>  
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peptide

<400> 32  
Ala Arg Lys Thr Lys Ser Arg Glu Arg Lys Asp  
1 5 10

<210> 33  
<211> 11  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 33  
Ala Ser Lys Lys Pro Lys Ala Asn Ile Lys Ala  
1 5 10

<210> 34  
<211> 11  
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<220>  
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peptide

<400> 34  
Ala Ser Lys Lys Pro Ala Ala Asn Ile Lys Ala  
1 5 10

<210> 35  
<211> 11  
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<220>  
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peptide

<400> 35  
Ala Ser Lys Ala Pro Ala Ala Asn Ile Lys Ala  
1 5 10

<210> 36  
<211> 11  
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<220>  
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peptide

<400> 36  
Ala Ser Ala Ala Pro Ala Ala Asn Ile Lys Ala  
1 5 10

<210> 37  
<211> 11  
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<220>  
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peptide

<400> 37  
Ala Ser Lys Lys Ala Lys Arg Asn Ile Lys Ala  
1 5 10

<210> 38  
<211> 11  
<212> PRT  
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<220>  
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peptide

<400> 38  
Ala Lys Lys Lys Lys Arg Ile Ser Ala Asn Pro  
1 5 10

<210> 39  
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<220>  
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peptide

<400> 39

Pro Asn Ala Ser Ile Arg Lys Lys Lys Lys Ala  
1 5 10

<210> 40

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 40

Lys Asn Ser Pro Lys Ala Arg Ile Lys Ala Lys  
1 5 10

<210> 41

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 41

Arg Thr Lys Gln Asp Lys Ala Gln Glu Arg Lys  
1 5 10

<210> 42

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 42

Gly Leu Lys Arg Trp Ala Pro Asn Lys Ala Ala  
1 5 10

<210> 43

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
peptide

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Lys Lys Lys Lys Lys Lys  
 1 5

&lt;210&gt; 44

&lt;211&gt; 848

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 44

Met Leu Gln Thr Lys Asp Leu Ile Trp Thr Leu Phe Phe Leu Gly Thr  
 1 5 10 15

Ala Val Ser Leu Gln Val Asp Ile Val Pro Ser Gln Gly Glu Ile Ser  
 20 25 30

Val Gly Glu Ser Lys Phe Phe Leu Cys Gln Val Ala Gly Asp Ala Lys  
 35 40 45

Asp Lys Asp Ile Ser Trp Phe Ser Pro Asn Gly Glu Lys Leu Thr Pro  
 50 55 60

Asn Gln Gln Arg Ile Ser Val Val Trp Asn Asp Asp Ser Ser Ser Thr  
 65 70 75 80

Leu Thr Ile Tyr Asn Ala Asn Ile Asp Asp Ala Gly Ile Tyr Lys Cys  
 85 90 95

Val Val Thr Gly Glu Asp Gly Ser Glu Ser Glu Ala Thr Val Asn Val  
 100 105 110

Lys Ile Phe Gln Lys Leu Met Phe Lys Asn Ala Pro Thr Pro Gln Glu  
 115 120 125

Phe Arg Glu Gly Glu Asp Ala Val Ile Val Cys Asp Val Val Ser Ser  
 130 135 140

Leu Pro Pro Thr Ile Ile Trp Lys His Lys Gly Arg Asp Val Ile Leu  
 145 150 155 160

Lys Lys Asp Val Arg Phe Ile Val Leu Ser Asn Asn Tyr Leu Gln Ile  
 165 170 175

Arg Gly Ile Lys Lys Thr Asp Glu Gly Thr Tyr Arg Cys Glu Gly Arg  
 180 185 190

Ile Leu Ala Arg Gly Glu Ile Asn Phe Lys Asp Ile Gln Val Ile Val  
 195 200 205

Asn Val Pro Pro Thr Ile Gln Ala Arg Gln Asn Ile Val Asn Ala Thr  
 210 215 220

Ala Asn Leu Gly Gln Ser Val Thr Leu Val Cys Asp Ala Glu Gly Phe  
 225 230 235 240

Pro Glu Pro Thr Met Ser Trp Thr Lys Asp Gly Glu Gln Ile Glu Gln  
 245 250 255

Glu Glu Asp Asp Glu Lys Tyr Ile Phe Ser Asp Asp Ser Ser Gln Leu  
 260 265 270  
 Thr Ile Lys Lys Val Asp Lys Asn Asp Glu Ala Glu Tyr Ile Cys Ile  
 275 280 285  
 Ala Glu Asn Lys Ala Gly Glu Gln Asp Ala Thr Ile His Leu Lys Val  
 290 295 300  
 Phe Ala Lys Pro Lys Ile Thr Tyr Val Glu Asn Gln Thr Ala Met Glu  
 305 310 315 320  
 Leu Glu Glu Gln Val Thr Leu Thr Cys Glu Ala Ser Gly Asp Pro Ile  
 325 330 335  
 Pro Ser Ile Thr Trp Arg Thr Ser Thr Arg Asn Ile Ser Ser Glu Glu  
 340 345 350  
 Lys Thr Leu Asp Gly His Met Val Val Arg Ser His Ala Arg Val Ser  
 355 360 365  
 Ser Leu Thr Leu Lys Ser Ile Gln Tyr Thr Asp Ala Gly Glu Tyr Ile  
 370 375 380  
 Cys Thr Ala Ser Asn Thr Ile Gly Gln Asp Ser Gln Ser Met Tyr Leu  
 385 390 395 400  
 Glu Val Gln Tyr Ala Pro Lys Leu Gln Gly Pro Val Ala Val Tyr Thr  
 405 410 415  
 Trp Glu Gly Asn Gln Val Asn Ile Thr Cys Glu Val Phe Ala Tyr Pro  
 420 425 430  
 Ser Ala Thr Ile Ser Trp Phe Arg Asp Gly Gln Leu Leu Pro Ser Ser  
 435 440 445  
 Asn Tyr Ser Asn Ile Lys Ile Tyr Asn Thr Pro Ser Ala Ser Tyr Leu  
 450 455 460  
 Glu Val Thr Pro Asp Ser Glu Asn Asp Phe Gly Asn Tyr Asn Cys Thr  
 465 470 475 480  
 Ala Val Asn Arg Ile Gly Gln Glu Ser Leu Glu Phe Ile Leu Val Gln  
 485 490 495  
 Ala Asp Thr Pro Ser Ser Pro Ser Ile Asp Gln Val Glu Pro Tyr Ser  
 500 505 510  
 Ser Thr Ala Gln Val Gln Phe Asp Glu Pro Glu Ala Thr Gly Gly Val  
 515 520 525  
 Pro Ile Leu Lys Tyr Lys Ala Glu Trp Arg Ala Val Gly Glu Glu Val  
 530 535 540  
 Trp His Ser Lys Trp Tyr Asp Ala Lys Glu Ala Ser Met Glu Gly Ile  
 545 550 555 560

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Thr | Ile | Val | Gly | Leu | Lys | Pro | Glu | Thr | Thr | Tyr | Ala | Val | Arg | Leu |
|     |     |     |     | 565 |     |     |     |     | 570 |     |     |     |     | 575 |     |
| Ala | Ala | Leu | Asn | Gly | Lys | Gly | Leu | Gly | Glu | Ile | Ser | Ala | Ala | Ser | Glu |
|     |     |     | 580 |     |     |     |     | 585 |     |     |     |     | 590 |     |     |
| Phe | Lys | Thr | Gln | Pro | Val | Gln | Gly | Glu | Pro | Ser | Ala | Pro | Lys | Leu | Glu |
|     |     | 595 |     |     |     |     | 600 |     |     |     |     | 605 |     |     |     |
| Gly | Gln | Met | Gly | Glu | Asp | Gly | Asn | Ser | Ile | Lys | Val | Asn | Leu | Ile | Lys |
|     | 610 |     |     |     |     | 615 |     |     |     |     | 620 |     |     |     |     |
| Gln | Asp | Asp | Gly | Gly | Ser | Pro | Ile | Arg | His | Tyr | Leu | Val | Arg | Tyr | Arg |
| 625 |     |     |     |     | 630 |     |     |     |     | 635 |     |     |     |     | 640 |
| Ala | Leu | Ser | Ser | Glu | Trp | Lys | Pro | Glu | Ile | Arg | Leu | Pro | Ser | Gly | Ser |
|     |     |     |     | 645 |     |     |     |     | 650 |     |     |     |     | 655 |     |
| Asp | His | Val | Met | Leu | Lys | Ser | Leu | Asp | Trp | Asn | Ala | Glu | Tyr | Glu | Val |
|     |     |     | 660 |     |     |     |     | 665 |     |     |     |     | 670 |     |     |
| Tyr | Val | Val | Ala | Glu | Asn | Gln | Gln | Gly | Lys | Ser | Lys | Ala | Ala | His | Phe |
|     |     | 675 |     |     |     |     | 680 |     |     |     |     | 685 |     |     |     |
| Val | Phe | Arg | Thr | Ser | Ala | Gln | Pro | Thr | Ala | Ile | Pro | Ala | Asn | Gly | Ser |
|     | 690 |     |     |     |     | 695 |     |     |     |     | 700 |     |     |     |     |
| Pro | Thr | Ser | Gly | Leu | Ser | Thr | Gly | Ala | Ile | Val | Gly | Ile | Leu | Ile | Val |
| 705 |     |     |     |     | 710 |     |     |     |     | 715 |     |     |     | 720 |     |
| Ile | Phe | Val | Leu | Leu | Leu | Val | Val | Val | Asp | Ile | Thr | Cys | Tyr | Phe | Leu |
|     |     |     | 725 |     |     |     |     |     | 730 |     |     |     |     | 735 |     |
| Asn | Lys | Cys | Gly | Leu | Phe | Met | Cys | Ile | Ala | Val | Asn | Leu | Cys | Gly | Lys |
|     |     |     | 740 |     |     |     |     | 745 |     |     |     |     | 750 |     |     |
| Ala | Gly | Pro | Gly | Ala | Lys | Gly | Lys | Asp | Met | Glu | Glu | Gly | Lys | Ala | Ala |
|     |     | 755 |     |     |     |     | 760 |     |     |     |     | 765 |     |     |     |
| Phe | Ser | Lys | Asp | Glu | Ser | Lys | Glu | Pro | Ile | Val | Glu | Val | Arg | Thr | Glu |
|     | 770 |     |     |     |     | 775 |     |     |     |     | 780 |     |     |     |     |
| Glu | Glu | Arg | Thr | Pro | Asn | His | Asp | Gly | Gly | Lys | His | Thr | Glu | Pro | Asn |
| 785 |     |     |     |     | 790 |     |     |     |     | 795 |     |     |     |     | 800 |
| Glu | Thr | Thr | Pro | Leu | Thr | Glu | Pro | Glu | Lys | Gly | Pro | Val | Glu | Ala | Lys |
|     |     |     | 805 |     |     |     |     |     | 810 |     |     |     |     | 815 |     |
| Pro | Glu | Cys | Gln | Glu | Thr | Glu | Thr | Lys | Pro | Ala | Pro | Ala | Glu | Val | Lys |
|     |     |     | 820 |     |     |     |     | 825 |     |     |     |     | 830 |     |     |
| Thr | Val | Pro | Asn | Asp | Ala | Thr | Gln | Thr | Lys | Glu | Asn | Glu | Ser | Lys | Ala |
|     |     | 835 |     |     |     |     | 840 |     |     |     |     | 845 |     |     |     |